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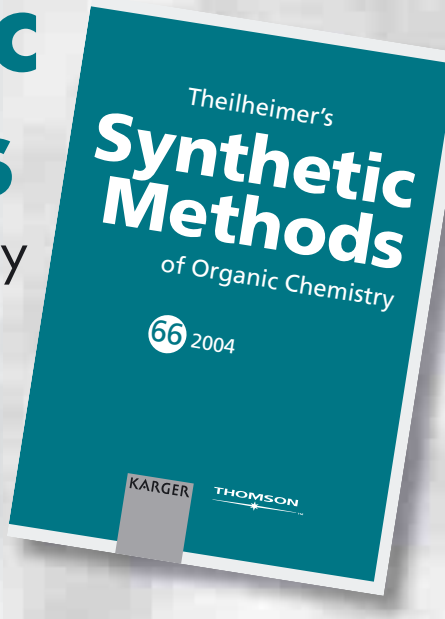

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Sample abstract –

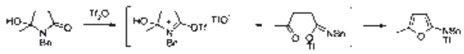
with special emphasis on key reactive intermediates, supported by pertinent comments on particular features, strengths and limitations.

Oxygen ↑ NS ⇃↾ O

Pyridine *C₅H₅N*

2-Sulfonylaminofurans from 5-hydroxy-2-pyrrolidones

136.



under mild conditions. A soln. of the startg. lactamol in methylene chloride treated under N_2 at -78° with 5 eqs. pyridine, followed by 2 eqs. triflic anhydride, the mixture warmed to 25° over 30 min, stirred for an additional 10 min, and water added → product. Y 60%. F.e. and from γ-ketocarboxylic acid amides, also N-trifluoroacetyl derivs. with trifluoroacetic anhydride s. P. Rashatasakhon, A. Padwa, Org. Lett. *5*, 189-91 (2003).

Nitrogen ↑ NS ⇃↾ N

Without additional reagents *w.a.r.*

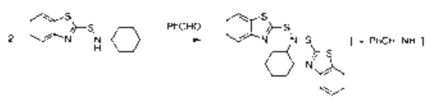
Trans-N-sulfamylation NH → NSO_2N<

with N-sulfamyl-2-oxazolidones cf. *21*, 138s52; with 1-sulfamylimidazolium triflates s. S. Beaudoin et al., J. Org. Chem. *68*, 115-9 (2003).

Benzaldehyde *PhCHO*

Sym. (disulfen)amines from sulfenamides $2 RSNHR' \rightarrow (RS)_2NR'$

137



A mixture of 52.6 g startg. sulfenamide and 21.2 g benzaldehyde in heptane refluxed for 11 h, cooled to room temp., and filtered → product. Y 89.7%. Benzaldehyde can be recovered by hydrolysis of the by-product (benzaldimine), thereby reducing the amount of waste. F.e.s. J.E. Steber, F.H. Barrows, United States patent US 6245912 (Uniroyal Chem. Co. Inc.).

Sample reviews

Theilheimer's Synthetic Methods of Organic Chemistry provides a reviews section and an overview of current trends in synthetic organic chemistry.

5, 666 Chiral reagents for the determination of **enantiomeric excess** and **absolute configuration** using NMR spectroscopy, T.J. Wenzel, J.D. Wilcox, Chirality *15*, 256-70 (2003); assignment of absolute configuration by NMR, J.M. Seco, R. Riguera et al., Chem. Rev. *104*, 17-118 (2004); absolute conformation revisited: experimental approach, M. Oki, S. Toyota, Eur. J. Org. Chem. *2004*, 255-67.

7, 281 **Phase transfer catalysis**, M. Makosza, M. Fedorynski, Catal. Rev.-Sci. Eng. *45*, 321-67 (2003); liquid-liquid phase transfer catalysis – basic principles and synthetic applications, D. Albanese, ibid. 369-95; hydrophobic interactions and chemical reactivity, S. Otto, J.B.F.N. Engberts, Org. Biomol. Chem. *1*, 2809-20 (2003); organic reactions in **microemulsions**, M. Hager, F. Currie, K. Holmberg, Topics Curr. Chem. *227*, 53-74 (2003).

12, 445 **Fluorous technologies** for solution-phase high-throughput organic synthesis, W. Zhang, Tetrahedron *59*, 4475-89 (2003); fluorinated alcohols: a new medium for selective and clean reactions, J.-P. Bégué, D. Bonnet-Delphon, B. Crousse, Synlett *2004*, 18-29.

16, 820 **Pyrrolotetrathiafulvalenes** and their applications in molecular and supramolecular chemistry, J.O. Jeppesen, J. Becher, Eur. J. Org. Chem. *2003*, 3245-66.

17, 169 Boron clusters – a new entity for DNA-**oligonucleotide modification**, Z.J. Lesnikowski, Eur. J. Org. Chem. *2003*, 4489-500; ferrocene-containing nucleic acids: synthesis and electrochemical properties, T.S. Zatsepin, S.Y. Andreev, T. Hianik, T.S. Oretskaya, Russ. Chem. Rev. *72*, 537-54 (2003); non-natural nucleosides for the specific recognition of Watson-Crick base pairs, M.G.M. Purwanto, K. Weisz, Curr. Org. Chem. *7*, 427-46 (2003); **dendrimers** for nanoparticle synthesis and dispersion stabilization, K. Esumi, Topics Curr. Chem. *227*, 31-52 (2003); metallodendrimers composed of organometallic building blocks, K. Onitsuka, S. Takahashi, ibid. *228*, 39-63 (2003); rotaxane dendrimers, J.W. Lee, K. Kim, ibid. 111-40.

18, 699 Catalytic synthesis of **phosphines** and related compounds, C. Baillie, J. Xiao, Curr. Org. Chem. *7*, 477-514 (2003); new vistas in chemistry and applications of primary phosphines, K.V. Katti, N. Pillarsetty, K. Raghuraman, Topics Curr. Chem. *229*, 121-41 (2003); electron-rich phosphines in organic synthesis, II. Catalytic applications, D.H. Valentine Jr, J.H. Hillhouse, Synthesis *2003*, 2437-60; reactions of **phosphorus ylids** with acyl chlorides: pathways and preparative potential, V.N. Listvan, V.V. Listvan, Russ. Chem. Rev. *72*, 787-96 (2003); recent advances in the chemistry of difunctionalized organo-phosphorus and -sulfur compounds, M. Gulea, S. Masson, Topics Curr. Chem. *229*, 161-98 (2003).

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